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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,803	03/22/2004	Edwin Franklin Barry	800.0118 (A1560)	9955
73846	7590	10/09/2009		
Peter H. Priest 5015 Southpark Drive, Suite 230 Durham, NC 27713			EXAMINER FAHERTY, COREY S	
			ART UNIT	PAPER NUMBER
			2183	
			MAIL DATE	DELIVERY MODE
			10/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/805,803	Applicant(s) BARRY ET AL.	
	Examiner Corey S. Faherty	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-12 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This office action is in response to the reply filed on 07/08/2009.
2. Claims 1-7, 9-12 and 28-30 are pending in the application and have been examined.

Election/Restrictions

3. Applicant's election with traverse in the reply filed on 07/08/2009 is acknowledged. The traversal is on the ground(s) that a previous restriction and election have been made and that the present claims have been fully examined previously. This is not found persuasive because the claims have been amended and the claims have therefore not been fully examined previously. Furthermore, it is at the examiner's discretion to determine during the course of examination if the claims encompass subject matter related to two different inventions. When such is the case, a restriction requirement is not only appropriate, but also beneficial to applicant in that a more thorough examination of each invention can be performed.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-7, 9-12 and 28-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

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relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

6. Claim 1 recites the limitations “a first pipeline” and “a second pipeline”. There does not appear to be support for this subject matter in the original teachings of the application. Rather, the relevant teachings in the specification are directed to a single adaptable pipeline. The claims therefore fail to meet the requirements of 35 U.S.C. 112, first paragraph. Claim 30 suffers from a similar deficiency.

7. Claim 1 recites the limitations “an adaptable decode stage for classifying and decoding the instruction stored in the instruction register and generating an instruction class indication” and “adapting a duration of latency of the adaptable fetch stage ... to the first execution latency for the class one instructions and to the second execution latency for the class two instructions dependent on the instruction class indication”. However, if the instruction class indication is not known until the instruction has already been fetched and decoded, it is unclear what impact adjusting those two stages has on the execution of the decoded instruction, if any. It appears that the latency is in fact not being adapted “for” the decoded instruction as is claimed, but rather for a subsequent instruction. However, no description of this functionality can be found in the specification. Furthermore, page 15 (rule 2) of the specification explicitly states that the invention does not require a reconfiguration of the fetch and decode stages for the two classes of instructions. The claim therefore fails to meet the requirements of 35 U.S.C. 112, first paragraph. Claim 30 suffers from similar deficiencies.

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8. Claims 2-7, 9-12 and 28-29 are rejected under 35 U.S.C. 112, first paragraph because they are dependent on claim 1 and therefore also include subject matter not described in the specification in an enabling fashion.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-7, 9-12 and 28-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 1 recites the limitations “an adaptable decode stage for classifying and decoding the instruction stored in the instruction register and generating an instruction class indication” and “adapting a duration of latency of the adaptable fetch stage ... to the first execution latency for the class one instructions and to the second execution latency for the class two instructions dependent on the instruction class indication”. However, if the instruction class indication is not known until the instruction has already been fetched and decoded, it is unclear what impact adjusting those two stages has on the execution of the decoded instruction, if any. It appears that the latency is in fact not being adapted “for” the decoded instruction as is claimed, but rather for a subsequent instruction. The scope of the claim is therefore indefinite. The claim therefore fails to meet the requirements of 35 U.S.C. 112, second paragraph. Claim 30 suffers from similar deficiencies.

12. Claims 2-7, 9-12 and 28-29 are rejected under 35 U.S.C. 112, second paragraph, for being indefinite, because they are each dependent on an indefinite claim.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey S. Faherty whose telephone number is (571) 270-1319. The examiner can normally be reached on Monday-Thursday and every other Friday, 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Corey S Faherty/
Examiner, Art Unit 2183

/David J. Huisman/
Primary Examiner, Art Unit 2183